

Amendment and Response

Applicant: Ashish Gupta

Serial No.: 10/080,440

Filed: February 22, 2002

Docket No.: 10019865-1

Title: SYSTEM AND METHOD FOR MEMORY INTERLEAVING USING CELL MAP WITH ENTRY GROUPING FOR HIGHER-WAY INTERLEAVING

REMARKS

This Amendment is responsive to the Office Action mailed November 28, 2003. In that Office Action, the Examiner acknowledged the provisional election of claims 1-11 during the telephone conference of November 3, 2003. The Examiner rejected claims 1-5, 7, and 11 under 35 U.S.C. §103(a) as being unpatentable over Lunteren, U.S. Patent No. 6,381,668 ("Lunteren"). Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Lunteren and Grossier et al., U.S. Patent No. 6,553,478 ("Grossier"). Claims 8-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lunteren and Douglas et al., U.S. Patent No. 6,480,943 ("Douglas").

With this Amendment, claims 12-28 have been cancelled and new claims 29-35 have been added. Claims 1-11 and 29-35 remain pending in the application and are presented for reconsideration and allowance.

Restriction Requirement

In the Office Action, the Examiner made a restriction requirement, indicating that Group I (claims 1-11) and Group II (claims 12-28) are distinct inventions. In a telephone conference held November 3, 2003 between the Applicant's representative, Jeff A. Holmen, and the Examiner, Applicant provisionally elected to prosecute Group I (claims 1-11). With this Amendment, Applicant confirms the election of Group I (claims 1-11), and claims 12-28 have been cancelled.

Claim Rejections under 35 U.S.C. §103

The Examiner rejected claims 1-5, 7, and 11 under 35 U.S.C. §103(a) as being unpatentable over Lunteren, U.S. Patent No. 6,381,668 ("Lunteren"). The Examiner indicated that Lunteren discloses a portion of claim 1, but stated that:

However, Lunteren differs in the following features of claim 1:

- i. Contiguous logical address space
- ii. receiving a first logical address, the first logical address including a plurality of address bits . . .

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iii. identifying a first entry in the first set of entries based on the first set and a second set of the address;

iv. identifying a first entry item in the first entry based on a third set of the address bits

(Office Action at para. no. 8, pages 4-5).

Despite the differences between claim 1 and the disclosure of Lunteren that were cited by the Examiner, the Examiner nonetheless rejected claim 1 under 35 U.S.C. § 103(a). Since the Examiner did not cite any other references in rejecting claim 1, the Examiner appears to be relying on Official Notice. However, as indicated in the Manual of Patent Examining Procedure, “[o]fficial notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well known.” MPEP § 2144.03(A). “It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well known.” *Id.* (emphasis in original). Applicant contends that the limitations in claim 1 that the Examiner appeared to indicate were not disclosed by Lunteren are not well known facts that are capable of instant and unquestionable demonstration as being well known. Applicant respectfully requests allowance of this claim, or requests pursuant to M.P.E.P. § 2144.03 that the Examiner cite a reference to teach the further limitations of claim 1.

In view of the above, Lunteren does not teach or suggest each and every limitation of independent claim 1. The Applicant respectfully traverses the rejection of claim 1, requests removal of the rejection of claim 1 under 35 U.S.C. § 103(a), and requests allowance of this claim. Since dependent claims 2-5, 7, and 11 further limit patentably distinct claim 1, claims 2-5, 7, and 11 are believed to be allowable over the cited reference. Applicant respectfully traverses the rejection of claims 2-5, 7, and 11, and allowance of claims 2-5, 7, and 11 is respectfully requested.

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Lunteren and Grossier. Claim 6 is dependent on independent claim 1. The Examiner has indicated that Lunteren does not teach or suggest several limitations of claim 1, as indicated

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above. Grossier also does not teach or suggest these limitations of claim 1. Since dependent claim 6 further limits patentably distinct claim 1, claim 6 is believed to be allowable over the cited references, either alone or in combination. Applicant respectfully traverses the rejection of claim 6, and allowance of claim 6 is respectfully requested.

The Examiner rejected claims 8-10 under 35 U.S.C. §103(a) as being unpatentable over Lunteren and Douglas. Claims 8-10 are each dependent on independent claim 1. The Examiner has indicated that Lunteren does not teach or suggest several limitations of claim 1, as indicated above. Douglas also does not teach or suggest these limitations of claim 1. Since dependent claims 8-10 further limit patentably distinct claim 1, claims 8-10 are believed to be allowable over the cited references, either alone, or in combination. Applicant respectfully traverses the rejection of claims 8-10, and allowance of claims 8-10 is respectfully requested.

Newly Submitted Claims

With this Amendment, Applicant has submitted new claims 29-35. Claims 29-33 are each dependent on independent claim 1. The Examiner has indicated that Lunteren does not teach or suggest several limitations of claim 1, as indicated above. The other cited references also do not teach or suggest these limitations of claim 1. Since dependent claims 29-33 further limit patentably distinct claim 1, claims 29-33 are believed to be allowable over the cited references, and allowance of claims 29-33 is respectfully requested. In addition, claims 29-33 are further distinguishable over the cited references. For example, claim 29 recites that "wherein at least one of the entries in the first set includes entry items that are different than entry items of other entries in the first set." As described in the specification of the present Application, in one embodiment, sixty-four-way interleaving is provided by combining or grouping together four sixteen-way entries 904 named ent_a, ent_b, ent_c, and ent_d. (See, e.g., Specification at page 20, line 36 to page 21, line 30). The entry, ent_a, provides the zero through fifteen ways of interleave of the full sixty-four-way interleave. The entry, ent_b, provides the sixteen through thirty-one ways of interleave of the full sixty-four-way interleave. The entry, ent_c, provides the thirty-two through forty-seven ways of interleave

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of the full sixty-four-way interleave. And the entry, ent_d, provides the forty-eight through sixty-three ways of interleave of the full sixty-four-way interleave. *Id.*

The cited references do not teach or suggest the limitation “wherein at least one of the entries in the first set includes entry items that are different than entry items of other entries in the first set” as recited in claim 29, nor the additional limitations recited in claims 30-33. In view of the above, claims 29-33 are believed to be allowable over the cited references, and allowance of claims 29-33 is respectfully requested.

Claim 34 is an independent system claim based on independent method claim 1 and newly submitted dependent claim 29. Claim 35 is dependent on claim 34. The Examiner has indicated that Lunteren does not teach or suggest several limitations of claim 1. The other cited references also do not teach or suggest these limitations of claim 1. Similarly, the cited references, either alone or in combination, do not teach or suggest each and every limitation of claims 34 and 35. For the reasons set forth above with reference to claims 1 and 29, claims 34 and 35 are believed to be allowable over the cited references, and allowance of claims 34 and 35 is respectfully requested.

Allowable Subject Matter

In light of the above, Applicant believes independent claims 1 and 34, and the claims depending therefrom, are in condition for allowance. Allowance of these claims is respectfully requested.

CONCLUSION

Any inquiry regarding this Amendment and Response should be directed to either David A. Plettner at Telephone No. (408) 447-3013, Facsimile No. (408) 447-0854 or Jeff A. Holmen at Telephone No. (612) 573-0178, Facsimile No. (612) 573-2004. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 5th day of February, 2004.

By Jeff A. Holmen
Name: Jeff A. Holmen